

1. A printer that prints images on a recording medium fed through the printer, comprising:

a line feeding device driven by the line feeding motor for feeding the recording medium through the printer;

a controller for controlling the line feeding motor to actuate in stepped increments and for controlling a number of the j nozzles utilized in printing the image,

wherein, for each stepped increment of the line feed motor, the line feeding device feeds the recording medium $(m \times 1/n)$ pixels of the print head pixel resolution, where m and n are integer numbers and m is greater than n , and

wherein, the controller controls the j nozzles that print in any one scan of the print head based on the number of increments of the line feed motor.

2. A printer according to Claim 1, wherein
m equals 3 and n equals 2.

printing a image on the recording medium by a print head scanning across the recording medium and ejecting ink from nozzles, the print head having j nozzles spaced at a predetermined pixel resolution

wherein, the j nozzles that print in any one scan of the print head are controlled based on the number of increments of the line feed motor.

12. A method according to Claim 9, wherein j equals 80 and the controller controls the 80 nozzles so that 78 or less nozzles print in any one scan of the print head.

14. A method according to Claim 8, wherein the printed resolution is a maximum printable resolution of the printer.

actuating a line feeding motor in
predetermined stepped increments;

printing a image on the recording medium by a print head scanning across the recording medium and ejecting ink from nozzles, the print head having j nozzles spaced at a predetermined pixel resolution that is less than a pixel resolution printed by the printer, j being an integer number;

controlling a number of the j nozzles
utilized in printing the image,

wherein, the j nozzles that print in any one scan of the print head are controlled based on the number of increments of the line feed motor.

16. Computer executable process steps according to Claim 15, wherein m equals 3 and n equals 2.

17. Computer executable process steps according to Claim 16, wherein the increment of the line feed motor corresponds to a line feed of 3 pixels in a printed pixel resolution.

18. Computer executable process steps according to Claim 16, wherein j equals 304 and the controller controls the 304 nozzles so that 300 or less nozzles print in any one scan of the print head.

19. Computer executable process steps according to Claim 16, wherein j equals 80 and the controller controls the 80 nozzles so that 78 or less nozzles print in any one scan of the print head.

20. Computer executable process steps according to Claim 15, wherein the j nozzles are spaced at a 600 dpi resolution and the printed resolution of the printer is 1200 dpi.

21. Computer-executable process steps according to Claim 15, wherein the printed pixel resolution is a maximum printable resolution of the printer.

22. A computer-readable medium in which is stored computer executable process steps for feeding a recording medium through a printer for printing

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wherein, the j nozzles that print in any one scan of the print head are controlled based on the number of increments of the line feed motor.

24. A computer-readable medium according to Claim 23, wherein the increment of the line feed motor corresponds to a line feed of 3 pixels in a printed pixel resolution.

26. A computer-readable medium according to Claim 23, wherein j equals 80 and the controller controls the 80 nozzles so that 78 or less nozzles print in any one scan of the print head.

28. A computer-readable medium according to Claim 22, wherein the printed pixel resolution is a maximum printable resolution of the printer.

performing rasterization, color conversion and halftone processing on the image data;
storing the processed image data in a print buffer for transmission to the printer;
calculating a line skip amount;
calculating a buffer offset amount; and
adjusting a starting position for storing of the image data in the print buffer based on a result of the calculated buffer offset amount,
wherein, the line skip amount and the buffer offset amount are calculated in a case where a first line of image data to be stored in the print buffer is white data.

31. An image processing method for processing image data to be sent to a printer, comprising the steps of:

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        storing the processed image data in a print
buffer for transmission to the printer;

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calculating a buffer offset amount; and

wherein, the line skip amount and the buffer offset amount are calculated in a case where a first line of image data to be stored in the print buffer is white data.

33. Computer-executable process steps for processing image data to be sent to a printer, comprising the steps of:

wherein, the line skip amount and the buffer offset amount are calculated in a case where a first line of image data to be stored in the print buffer is white data.

34. Computer-executable process steps according to Claim 33, wherein the printer has a line feed ratio of $m \times 1/n$, where m and n are integer numbers greater than 1, m is greater than n , and the line skip amount and the buffer offset amount are calculated based on the line feed ratio.

adjusting a starting position for storing
of the image data in the print buffer based on a
result of the calculated buffer offset amount,

36. A computer-readable medium according to Claim 35, wherein the printer has a line feed ratio of $m \times 1/n$, where m and n are integer numbers greater than 1, m is greater than n , and the line skip amount and the buffer offset amount are calculated based on the line feed ratio.

generating a line of image data;
determining whether at least a number of
contiguous lines of image data do not include a
pixel to be printed, the number of contiguous lines
corresponding to the feed amount unit; and
sending line skip amount information to the
printer based on a result of the determining step.

storing the line of image data in a print buffer for transmission to the printer; and calculating the line skip amount.

calculating a buffer offset amount; and
adjusting a starting position for storing
the image data in the print buffer based on a result
of the calculated buffer offset amount,

40 Computer-executable process steps for processing image data to be sent to a printer that prints image data on a recording medium at a print pixel resolution greater than a resolution of a print head and feeds the recording medium in units of a feed amount corresponding to $(m \times 1/n)$ pixels of the print head resolution, where m and n are integer numbers and m is greater than n , the process steps comprising:

determining whether at least a number of contiguous lines of image data do not include a pixel to be printed, the number of contiguous lines corresponding to the feed amount unit; and

41. Computer-executable process steps according to Claim 40, wherein the determining step comprises:

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        storing the line of image data in a print
buffer for transmission to the printer; and
        calculating the line skip amount.

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        calculating a buffer offset amount; and
        adjusting a starting position for storing
the image data in the print buffer based on a result
of the calculated buffer offset amount,

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43. A computer-readable medium on which are stored computer-executable process steps for processing image data to be sent to a printer that prints image data on a recording medium at a print pixel resolution greater than a resolution of a print head and feeds the recording medium in units of a feed amount corresponding to $(m \times 1/n)$ pixels of the print head resolution, where m and n are integer numbers and m is greater than n , the process steps comprising:

generating a line of image data;
determining whether at least a number of
contiguous lines of image data do not include a
pixel to be printed, the number of contiguous lines
corresponding to the feed amount unit; and
sending line skip amount information to the
printer based on a result of the determining step.

44. A computer-readable medium according to Claim 43, wherein the determining step comprises:
storing the line of image data in a print buffer for transmission to the printer; and
calculating the line skip amount.

wherein, the skip amount and the buffer offset amount are calculated in a case where a first line of image data to be stored in the print buffer is white data.

wherein, to print the image, the recording medium line feed motor is actuated n increments, or an integer multiple of n increments between bands.

47. A printer according to Claim 46,
wherein m equals 3 and n equals 2.

49. A printer according to Claim 48,
wherein the print head comprises 304 nozzles and 300
or less nozzles are utilized in printing any one
band.

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wherein the print head comprises 304 nozzles and 300
or less nozzles are utilized in printing any one
band.

51. A printer according to Claim 46,
wherein the first resolution corresponding to the
nozzle spacing is 600 dpi.

53. A method of feeding a recording medium through a printer for printing images on the recording medium, comprising the steps of:

feeding the recording medium through the printer by a line feeding device driven by the line feeding motor; and

performing banded printing of an image on
the recording medium by a print head scanning across

~~60. Computer-executable process steps for feeding a recording medium through a printer for printing images on the recording medium, comprising the steps of:~~

feeding the recording medium through the printer by a line feeding device driven by the line feeding motor; and

wherein, one increment of the line feeding motor results in a feed amount of m/n times the print head nozzle spacing, where m/n is greater than 1, and m and n are integer values where m is greater than n , and

61. Computer-executable process steps according to Claim 60, wherein m equals 3 and n equals 2.

62. Computer-executable process steps according to Claim 60, wherein less than all of the nozzles of the print head are utilized in printing

performing banded printing of an image on
the recording medium by a print head scanning across

the recording medium, the print head having nozzles spaced at a first resolution,

wherein, one increment of the line feeding motor results in a feed amount of m/n times the print head nozzle spacing, where m/n is greater than 1, and m and n are integer values where m is greater than n , and

wherein, to print the image, the line feeding motor is actuated n increments, or an integer multiple of n increments between bands.

68. A computer-readable medium according to Claim 67, wherein m equals 3 and n equals 2.

69. A computer-readable medium according to Claim 67, wherein less than all of the nozzles of the print head are utilized in printing the image in any one band and a number of the nozzles utilized is related to m/n .

70. A computer-readable medium according to Claim 69, wherein the print head comprises 304 nozzles and 300 or less nozzles are utilized in printing any one band.

71. A computer-readable medium according to Claim 69, wherein the print head comprises 80 nozzles and 78 or less nozzles are utilized in printing any one band.

72. A computer-readable medium according to Claim 67, wherein the first resolution corresponding to the nozzle spacing is 600 dpi.

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73. A computer-readable medium according to Claim 67, wherein the first resolution corresponding to the nozzle spacing is 600 dpi, m equals 3 and n equals 2.